

NEW SPECIES OF *PRIMULA* (PRIMULACEAE) FROM UTAH

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ABSTRACT.— Named as a new species from the House Range of Millard County, Utah, as *Primula domensis* Kass & Welsh.

The House Range in west central Millard County, Utah, is famous for its massive limestone and dolomite sequence, which exposes cliffs with a relief of more than 1280 m on its western flank. Drainage plunges steeply on the western side, more gently so on the eastern side of the range. The foot slopes are clothed sparsely by mixed desert shrub vegetation, with pinyon-juniper woodland becoming important at about the 2135 m contour. The range is arid, despite its high elevation, and has only a few truly mesic sites.

Collections of plants have been taken from the House Range for almost a century, but no intensive study had been undertaken until the present time. Beginning in 1981 a study of the flora of the House Range was undertaken by the senior author (Kass 1983) as partial fulfillment of the requirements for completion of a master of science degree at Brigham Young University. Those collections, consisting of some 366 species, were routine for the most part, yielding few surprises. An exception among the specimens taken is a dwarf primrose species, whose characteristics, in combination, are unique among the primroses of the west.

Except for the rather widely distributed *Primula parryi* Gray and *P. specuicola* Rydb., the only other primulas known from Utah are rare and restricted (Welsh 1985). *Primula incana* Jones is known from Daggett County and, until 1982, only from its historic type locality in western Garfield County, and *P. maguirei* L. O. Williams is known only from Logan Canyon in Cache County. During 1982 *P. incana* was rediscovered in Garfield County by E. S. Nixon and in 1984 by Sherel Goodrich, presumably neither locality far re-

moved from where it was initially discovered by Marcus E. Jones in 1894. Thus, the discovery of a primrose in the House Range was unexpected. However, *P. nevadensis* N. Holmgren is known from the Mt. Washington area of the Snake Range in White Pine County, Nevada, only 80 km distant from the newly discovered population of primrose growing in the House Range. Relationships of the House Range primrose apparently lie most closely with *P. maguirei* and *P. nevadensis* and more remotely with *P. cusickiana* Gray, a plant of eastern Oregon and Idaho.

Primula domensis Kass & Welsh, sp. nov. Species habitu cum *Primula maguirei* L. O. Williams sed in corollae tubis calyce sub 1.5 longioribus (nec 1.5–2) et corollae lobis latioribus (4–12 nec 4–5 mm) et foliis plus dentatibus differt; ab *Primula nevadensis* N. Holmgren in inflorescentia foliis superans differt; similis *Primula cusickiana* Gray in habitu calyce et corollae tubis ad calyce statura sed in foliis plus dentibus et majoribus et plantis majoribus differt.

TYPE.— USA: Utah: Millard Co., Sawtooth Canyon, House Range, T19S, R14W, S23, 2590 m, limestone cliff faces, in *Cercocarpus intricatus*–*Ephedra viridis* community, 4 June 1982, R. and J. Kass 884 (Holotype BRY; isotypes NY, RM, POM).

Plants 7–15 cm tall, from a short, rhizomatous caudex, this clothed with persistent, brown leaf bases; leaves 2–8 (11) cm long, 5–22 mm wide, oblanceolate to spatulate, dentate to subentire, tapering to a broad petiole, green and more or less glandular on both sides; bracts usually 3, 1.5–10 mm long, lanceolate, not swollen at the base, glabrous or mealy; peduncle apex glabrous or somewhat

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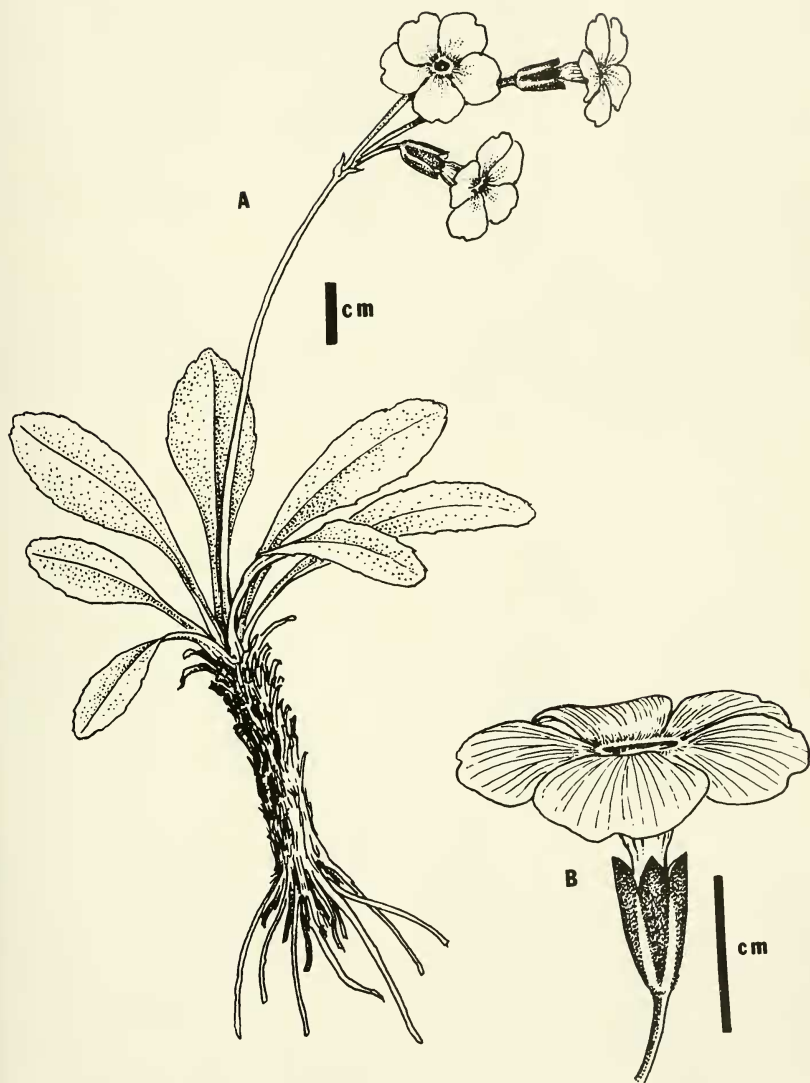


Fig. 1. *Primula domensis* Kass & Welsh. A, Habit. B, Detail of flower.

mealy; umbels 1- to 5-flowered, the pedicels 5–22 mm long; calyx 8–12 mm long, mealy or glabrous, the teeth shorter than the tube, more or less accrescent in fruit; corolla rose to lavender, the tube surpassing the calyx, but less than twice its length, the limb 12–25 mm wide, the lobes shorter than the tube, 4–12 mm wide; capsule to 8 mm long, not surpassing the calyx.

ADDITIONAL SPECIMENS.—Utah: Millard Co., House Range, Notch Peak, T19S, R14W, S23, moist limestone cliffs at 2623 m, 22 May 1981, R. Kass 289 (BRY); *Ibid.*, T19S, R14W, S22, limestone cliffs at 2745 m, 27 June 1981, R. Kass & S. White 473 (BRY; UT, UTC).

The House Range primrose is most closely similar to *P. nevadensis* and *P. maguirei*, between whose ranges it occurs. It differs from the former in the inflorescence to leaf proportions (leaves are overtopped by the inflorescence) and leaf shape (leaves spatulate to

oblanceolate, not cuneate) and from the latter in the corolla tube to calyx proportions, mostly broader corolla lobes, and more consistently toothed leaves. It seems probable that each of these geographically and genetically isolated microspecies would be treated best as portions of an expanded *P. cusickiana*, the first named of the group. However, no such combination is intended or implied herein.

The specific epithet is taken from the word "house" (*domus* in Latin) from the House Range.

REFERENCES

- KASS, R. J. 1983. A floristic study of the House Range, Millard County, Utah. Unpublished thesis. Brigham Young University, Provo, Utah. 75 pp.
- WELSH, S. L. 1985. Utah flora: Primulaceae. Unpublished manuscript. Brigham Young University, Provo, Utah. 8 pp.